

AMENDMENTS TO THE CLAIMS

Please cancel Claims 5-17; amend Claims 1, 2 and 4; and add new Claims 18-27 as follows.

LISTING OF CLAIMS

1. (currently amended) A cooling device for cooling a heat-generating element, comprising:

two outer plates;

a plurality of sets of unit plates ~~having the same shape, the unit plates being arranged to be~~ stacked in a plate-thickness direction between the two outer plates, each of the sets of unit plates comprising a plurality of unit plates having the same shape arranged in a plan direction substantially perpendicular to the plate thickness direction; and

a plurality of radiating fins having the substantially same width as each unit plate in a width direction, the radiating fins being provided on a surface of one ~~outer~~ plate ~~among~~ of the two outer plates, wherein:

each of the unit plates has a plurality of slits through which refrigerant vapor boiled and vaporized by heat from the heat-generating element flows, the slits being provided to dissipate heat of the refrigerant vapor from the one outer plate to an outside through the radiating fins,

with respect to the two outer plates, ~~two or more sheets of~~ the unit plates in each set are arranged in parallel, and

the radiating fins are arranged on the one outer plate in parallel, each radiating fin ~~by the number~~ corresponding to ~~[[the]]~~ a respective unit plates ~~arranged in parallel~~ plate.

2. (currently amended) The cooling device according to claim 1, wherein ~~[[among]]~~ the other of the two outer plates, ~~the other outer plate~~ has a plurality of apertures communicating with the slits in each of the unit plates arranged in parallel, the cooling device further comprising

a header communicating with the slits in each of the unit plates through the apertures.

3. (original) The cooling device according to claim 1, further comprising a boiling unit in which liquid refrigerant is stored, the boiling unit having a surface onto which the heat-generating element is attached, wherein:

the unit plates are stacked between the two outer plates to construct a condensation unit for condensing refrigerant vapor boiled and vaporized in the boiling unit; and

the boiling unit and the condensation unit are coupled together through a pipe.

4. (currently amended) The cooling device according to claim 1, wherein:

the unit plates are stacked between the two outer plates to form a hermetically-sealed refrigerant container in which boiling and condensation of refrigerant is repeated; and

~~among the two outer plates,~~ the heat-generating element is attached onto a surface of the other of the two outer ~~[[plate]]~~ plates.

5.-17. (cancelled)

18. (new) The cooling device according to claim 1, wherein two of the unit plates adjacent to each other in the plan direction have the same slit shape.

19. (new) The cooling device according to claim 1, wherein:
one set of unit plates arranged in the plan direction define a plate member;
and
each outer plate has a size that is approximately equal to a size of the plate member.

20. (new) The cooling device according to claim 1, wherein the slits are provided to extend in the width direction.

21. (new) A cooling device for cooling a heat-generating element, comprising:
two outer plates;

a plurality of inner plates stacked in a stack direction between the two outer plates; and

a plurality of radiating fins having substantially the same dimension in a first direction perpendicular to the stack direction, the radiating fins being arranged on a surface of one of the two outer plates, wherein:

each of the inner plates has a plurality of slits through which refrigerant vapor boiled and vaporized by heat from the heat-generating element flows,

with respect to the two outer plates, two or more inner plates are arranged in parallel with each other, and

each of the inner plates comprises plural unit plates arranged in a second direction perpendicular to the first direction.

22. (new) The cooling device according to claim 21, wherein the radiating fins are arranged on the one outer plate in parallel.

23. (new) The cooling device according to claim 21, wherein two of the unit plates adjacent to each other in the second direction have the same slit shape.

24. (new) The cooling device according to claim 21, wherein, the other of the two outer plates has a plurality of apertures communicating with the slits in each of the inner plates, the cooling device further comprising

a header communicating with the slits in each of the inner plates through the apertures.

25. (new) The cooling device according to claim 21, further comprising a boiling unit in which liquid refrigerant is stored, the boiling unit having a surface onto which the heat-generating element is attached, wherein:

the inner plates are stacked between the two outer plates to construct a condensation unit for condensing refrigerant vapor boiled and vaporized in the boiling unit; and

the boiling unit and the condensation unit are coupled together through a pipe member.

26. (new) The cooling device according to claim 21, wherein each of the inner plates has a size approximately equal to that of each outer plate.

27. (new) The cooling device according to claim 26, wherein the unit plates have the same shape.